

## RCRA REVISION CHECKLIST 28

Standards for Hazardous Waste Storage and Treatment Tank Systems  
51 FR 25422-25486  
July 14, 1986  
as amended on August 15, 1986 at 51 FR 29430-29431  
(Non-HSWA Cluster III and HSWA Cluster I)

Note: 1) This checklist is part of both non-HSWA Cluster III and HSWA Cluster I. States are encouraged to apply for this checklist under non-HSWA Cluster III as its due date occurs sooner than that for the HSWA Cluster. Those changes which implement HSWA are marked as Footnote 1. Please read this footnote for further guidance regarding these provisions. 2) Additional interpretation, clarification, and correction of typographical errors relative to this Revision Checklist 28 are subsequently addressed by Revision Checklist 52 (September 2, 1988, 53 FR 34079). States are encouraged to consider the changes associated with Revision Checklist 52 when implementing the changes addressed by Revision Checklist 28.

					STATE ANALOG IS:
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

### PART 260 - HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

#### SUBPART B - DEFINITIONS

##### DEFINITIONS

1	"aboveground tank"	260.10
1	"ancillary equipment"	260.10
1	"component"	260.10
1	"corrosion expert"	260.10
1	"existing tank system" or "existing component"	260.10
1	"inground tank"	260.10
1	"installation inspector"	260.10
1	"leak detection system"	260.10
1	"new tank system"	260.10
1	"on ground tank"	260.10
1	"sump"	260.10
1	"tank system"	260.10

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

			STATE ANALOG IS:		
			ANALOGOUS	EQUIV-	MORE
			STATE CITATION	ALENT	BROADER
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION				IN SCOPE
1 "underground tank"	260.10				
1 "unfit-for-use tank system"	260.10				
1 "zone of engineering control"	260.10				

PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A - GENERAL

†	<u>EXCLUSIONS</u>	
	secondary materials reclaimed or returned to process	261.4(a)(8)

PART 262 - STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

SUBPART C - PRE-TRANSPORT REQUIREMENTS

	<u>ACCUMULATION TIME</u>	
1	accumulation on-site	262.34(a)(1)
	compliance with Subpart I of 265	262.34(d)(2)
	compliance with Subpart J of 265	262.34(d)(3)

PART 264 - STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE  
TREATMENT, STORAGE AND DISPOSAL FACILITIES

SUBPART B - GENERAL FACILITY STANDARDS

GENERAL INSPECTION REQUIREMENTS

frequency of inspection	264.15(b)(4)
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SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

OPERATING RECORD

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

			STATE ANALOG IS:		
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
data requirements	264.73(b)(6)				
SUBPART G - CLOSURE AND POST-CLOSURE					
APPLICABILITY					
1 closure and post-closure compliance with 264.197	264.110(b)(3)				
SUBPART H - FINANCIAL REQUIREMENTS					
APPLICABILITY					
1 financial responsibility compliance with 264.197	264.140(b)(3)				
SUBPART J - TANK SYSTEMS					
APPLICABILITY					
1 applicability, tank systems used for storing or treating hazardous waste	264.190				
1,2 † exemptions from secondary containment requirements	264.190(a)&(b)				
ASSESSMENT OF EXISTING TANK SYSTEM'S INTEGRITY					
1 written assessment requirement	264.191(a)				
1 minimum assessment considerations	264.191(b)				
1 12 mos. deadline if materials become hazardous waste after 7/14/86	264.191(c)				
1 tank systems found to be leaking or unfit for use	264.191(d)				
DESIGN AND INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS					
1 information to be					

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

			STATE ANALOG IS:		
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
included in written assessments for new tanks	264.192(a)				
1,2 new tank installation procedures; inspection requirements	264.192(b)				
1 backfilling requirements for new underground tank systems	264.192(c)				
1 tightness requirement	264.192(d)				
1 protection of ancillary equipment	264.192(e)				
1 corrosion protection requirements	264.192(f)				
1 written statements and certification statements	264.192(g)				
<b>CONTAINMENT AND DETECTION OF RELEASES</b>					
1,2 schedule for providing secondary containment for tank systems	264.193(a)				
1 minimum requirements for secondary systems	264.193(b)				
1 minimum spec. of secondary containment	264.193(c)				
1 devices that satisfy the secondary containment requirements	264.193(d)				
1,2 additional requirements for liner and vault systems, and double-walled tanks	264.193(e)				
1 ancillary equipment must be provided with full secondary containment	264.193(f)				
1,2 exceptions at 264.193(f)	264.193(f)(1)-(4)				
†,1 variance requirements	264.193(g)				
1 requirements for addressing releases					

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

			STATE ANALOG IS:		
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
from tank systems that have obtained variances	264.193(g)(3)&(4)				
1 procedures for ↑ requesting a variance	264.193(h)				
1,2 requirements for all tank systems until such time as second- ary containment is provided	264.193(i)				
<b>GENERAL OPERATING REQUIREMENTS</b>					
1 hazardous waste or treatment reagents not to be placed in tank systems	264.194(a)				
1 minimum controls and practices to prevent spills and overflows	264.194(b)				
1 requirements if a leak or spill occurs in the tank system	264.194(c)				
<b>INSPECTIONS</b>					
1 schedules & procedure for inspecting overfill controls	264.195(a)				
1 daily inspection requirements	264.195(b)				
1 minimum inspection frequency for cathodic protection systems	264.195(c)				
1 documentation in operating record	264.195(d)				
<b>RESPONSE TO LEAKS OR SPILLS AND DISPOSITION OF LEAKING OR UNFIT-FOR-USE TANK SYSTEMS</b>					
1 immediate removal (from service) of leaking or unfit-for-use tank systems	264.196				
1 prevent flows of additional wastes	264.196(a)				

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

			STATE ANALOG IS:			
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE	
1 removal of waste from tank system or secondary containment system	264.196(b)					
1 containment of visible releases to the environment	264.196(c)					
1,2 notifications/reports	264.196(d)					
1 provision of secondary containment, repair, or closure	264.196(e)					
1,2 certification closure requirements	264.196(f)					
<b>CLOSURE AND POST-CLOSURE CARE</b>						
1 general closure requirements	264.197(a)					
1 specific requirements when contaminated soils cannot practicably be removed or decontaminated; closure as a landfill	264.197(b)					
1,2 closure plans and financial responsibility requirements for tank systems without secondary containment that fall under §264.193(b)-(f) and are not exempt from secondary containment requirements	264.197(c)					
<b>SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES</b>						
1 limited placement of I or R wastes in tank systems	264.198(a)					
1 compliance with maintenance of protective distances	264.198(b)					
<b>SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES</b>						

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

		STATE ANALOG IS:			
		ANALOGOUS	EQUIV-	MORE	BROADER
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	STATE CITATION	ALERT	STRINGENT	IN SCOPE
1 limited placement of incompatible wastes in tank systems	264.199(a)				
1 use of tank system that previously held incompatible wastes	264.199(b)				
remove paragraph	264.200				

PART 265 - INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF  
HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES

SUBPART B - GENERAL FACILITY STANDARDS

GENERAL WASTE ANALYSIS

methods for additional waste analysis 265.13(b)(6)

GENERAL INSPECTION REQUIREMENTS

inspection frequency 265.15(b)(4)

SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

OPERATING RECORD

records & results of analysis & trial tests 265.73(b)(3)  
monitoring, testing, of analytical data 265.73(b)(6)

SUBPART G - CLOSURE AND POST-CLOSURE

APPLICABILITY

1 tank systems which must comply with land-fill requirements 265.110(b)(2)

SUBPART H - FINANCIAL REQUIREMENTS

1 financial responsibility requirements 265.140(b)

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

		STATE ANALOG IS:			
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE

SUBPART J - TANK SYSTEMS

APPLICABILITY

1	tank systems used for storing & treating hazardous waste	265.190			
1	exemptions from secondary containment requirements	265.190(a)&(b)			

ASSESSMENT OF EXISTING TANK SYSTEMS OR COMPONENTS

1	written assessment requirement	265.191(a)			
1	minimum assessment considerations	265.191(b)			
1	12 mos. deadline for materials which became hazardous waste after 7/14/86	265.191(c)			
1	tank systems found to be leaking or unfit for use	265.191(d)			

DESIGN AND INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS

1,2	information to be included in the written assessment for new underground tank	265.192(a)			
1	new tank installation procedures; inspection requirements	265.192(b)			
1	backfilling requirements for new underground tank systems	265.192(c)			
1	tightness requirements	265.192(d)			
1	protection of ancillary equipment	265.192(e)			
1	corrosion protection requirements	265.192(f)			
1	written statements and certification statements	265.192(g)			

CONTAINMENT AND DETECTION OF RELEASES



RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

		STATE ANALOG IS:				
	FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
1,2	applicability of secondary containment requirements	265.193(a)				
1	minimum requirements for secondary containment systems	265.193(b)				
1	minimum specifications of secondary containment	265.193(c)				
1	devices that secondary containment for tanks must include	265.193(d)				
1,2	additional requirements for liner and vault systems, and doubled walled tanks	265.193(e)				
1	ancillary equipment must be provided with full secondary containment	265.193(f)				
1	† exception to 265.193(f)	265.193(f)(1)-(4)				
1,2	† variance requirements	265.193(g)				
1	† procedures for requesting a variance	265.193(h)				
1,2	requirements for all tanks systems until such time as secondary containment is provided	265.193(i)				
GENERAL OPERATING REQUIREMENTS						
1	hazardous waste or treatment reagents not to be placed in tank system	265.194(a)				
1	minimum controls and practices to prevent spills and overflows	265.194(b)				
1	requirements if a leak or spill occurs in the tank system	265.194(c)				
INSPECTIONS						

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

			STATE ANALOG IS:		
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
1 daily inspection requirements	265.195(a)				
1 minimum inspection frequency for cathodic protection system	265.195(b)				
1 documentation in operating record	265.195(c)				
RESPONSE TO LEAKS OR SPILLS AND DISPOSITION OF LEAKING OR UNFIT-FOR-USE TANK SYSTEMS					
1 immediate removal (from service) of leaking or unfit-for-use tank systems	265.196				
1 prevent flow of additional wastes	265.196(a)				
1 removal of waste from tank system or secondary containment system	265.196(b)				
1 containment of visible releases to the environment	265.196(c)				
1 notifications/reports	265.196(d)				
1 provision of secondary containment, repair, or closure	265.196(e)				
1 certification of major repairs	265.196(f)				
CLOSURE AND POST-CLOSURE CARE					
1 general closure requirements	265.197(a)				
1 specific requirements when contaminated soils cannot practicably be removed or decontaminated; closure as a landfill	265.197(b)				

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

		STATE ANALOG IS:			
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
1 requirements for tank systems without secondary containment that fall under §265.193(b)-(f) and are not exempt from secondary containment requirements	265.197(c)				
<b>SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES</b>					
1 limited placement of I or R wastes in tank systems	265.198(a)				
1 compliance with maintenance of protective distance	265.198(b)				
<b>SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES</b>					
1 limited placement of incompatible wastes in tank systems	265.199(a)				
1 use of tank system that previously held incompatible wastes	265.199(b)				
<b>WASTE ANALYSIS AND TRIAL TESTS</b>					
1 waste analysis and treatment or storage tests	265.200(a)				
1 obtain written, documented information on similar waste/operating conditions	265.200(b)				
<b>SPECIAL REQUIREMENTS FOR GENERATORS OF BETWEEN 100 AND 1000 KG/MO THAT ACCUMULATE HAZARDOUS WASTE IN TANKS</b>					
general applicability requirements	265.201(a)				
general operating requirements for generators of between 100 and 1000 kg/mo of hazardous waste	265.201(b)				
inspection requirements	265.201(c)				

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:		
			EQUIV- ALENT	MORE STRINGENT	BROADER IN SCOPE
closure requirements	265.201(d)				
special requirements for I or R wastes	265.201(e)				
special requirements for incompatible wastes	265.201(f)				

PART 270 - EPA ADMINISTERED PERMIT PROGRAMS: THE  
HAZARDOUS WASTE PERMIT PROGRAM

SUBPART B - PERMIT APPLICATION

CONTENTS OF PART B: GENERAL REQUIREMENTS

- |   |   |               |
|---|---|---------------|
| 1 | general inspection<br>schedule              | 270.14(b)(5)  |
| 1 | copies of closure and<br>post-closure plans | 270.14(b)(13) |

SPECIFIC PART B INFORMATION REQUIREMENTS FOR TANK SYSTEMS

- |     |   |           |
|-----|---|-----------|
| 1,2 | written certified<br>assessment of each<br>tank system                                    | 270.16(a) |
| 1   | dimensions and<br>capacity of each tank   | 270.16(b) |
| 1   | description of feed<br>systems, safety cutoff<br>bypass systems, and<br>pressure controls | 270.16(c) |
| 1   | diagram of piping,<br>instrumentation, and<br>process flow for each<br>tank system        | 270.16(d) |
| 1,2 | description of external<br>corrosion protection   | 270.16(e) |
| 1   | description of new<br>tank installation   | 270.16(f) |
| 1   | plans and description<br>of secondary contain-<br>ment systems                            | 270.16(g) |
| 1   | information require-<br>ments for systems for<br>which a variance will<br>be sought       | 270.16(h) |

RCRA REVISION CHECKLIST 28: Standards for Hazardous Waste Storage  
and Treatment Tank Systems (cont'd)

		STATE ANALOG IS:			
		ANALOGOUS	EQUIV-	MORE	BROADER
FEDERAL REQUIREMENT	FEDERAL RCRA CITATION	STATE CITATION	ALERT	STRINGENT	IN SCOPE
1 description of controls and practices to prevent spills and overflows	270.16(i)				
1 description of design and operating for tank systems handling ignitable, reactive, or incompatible wastes	270.16(j)				

SUBPART G - INTERIM STATUS

CHANGES DURING INTERIM STATUS

1 changes made solely to comply with §265.193 not included under this section	270.72(e)				
1	These regulations implement HSWA only to the extent that they apply to tank systems owned or operated by small quantity generators, establish leak detection requirements for all new underground tank systems, and establish permitting standards for underground tank systems that cannot be entered for inspection. They also implement RCRA insofar as they apply to certain other tank systems. It is recommended that States seek program modification for the rules promulgated under both RCRA authority and HSWA authority by the deadline for the non-HSWA Cluster III (July 1, 1988).				
2	See technical corrections of August 15, 1986 (51 <u>FR</u> 29430).				